



BRUHAT BANGALORE MAHANAGARA PALIKE

Project: Improvements to Roads and Drains Bhadrappa Layout in ward No 8 Kodigehalli, Kodigehalli Sub Division.

								Est Cost: =20.0Lakh	
Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Desilt	Cum							
	Maruthi Nagar 1st Stage								
	1st Cross		1	70.00	0.70	0.45	22.05		
			1	70.00	0.30	0.30	6.30		
	2nd Cross		2	130.00	0.45	0.50	58.50		
			2	70.00	0.70	0.45	44.10		
	3rd Cross		2	120.00	0.70	0.50	84.00		
	4th Cross		2	110.00	0.70	0.45	69.30		
	6th Cross		2	55.00	0.60	0.45	29.70		
	7th Cross		1	55.00	0.70	0.45	17.33		
	8th Cross		2	80.00	0.70	0.45	50.40		
	Over Burden Earth								
			2	220.00	1.50	0.50	330.00		
							711.68	186.92	133026.29
2	Removing & Refixing Stone slabs of drains and Pointing in C.M(1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)								
	BS Slab cover	Sqm							
	4th Cross		2	110.00	1.20	--	264.00		
	6th Cross		2	55.00	1.20	--	132.00		
	7th Cross		1	55.00	1.20	--	66.00		
	8th Cross		2	80.00	1.20	--	192.00		
	Consider 30% for Existing Slabs						196.20		
	Consider 15% for missing and Damage Slabs						-29.43		
	BS Slab Drain								
	1st Cross		2	70.00	1.35	--	189.00		
	2nd Cross		2	130.00	1.35	--	351.00		
			2	70.00	1.35	--	189.00		
	3rd Cross		2	120.00	1.35	--	324.00		
	4th Cross		2	110.00	1.35	--	297.00		
	6th Cross		2	55.00	1.35	--	148.50		
	7th Cross		1	55.00	1.35	--	74.25		
	8th Cross		2	80.00	1.35	--	216.00		
	Consider 40% for Damaged Drain						715.50		
	Consider 20% for missing and Damage Slabs						-37.80		
							844.47	80.56	68030.50
3	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 10cms thick (P.No.25, I.No.5.31.2 of PW, P&IWTD SR 2016-17)								
	For BS Slab Drain / Missing	Sqm					29.43		
							29.43	825.74	24301.53

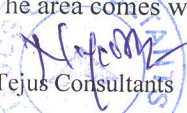
Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
4	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc... Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
	Maruthinagar 1st Stage	Sqm							
	Consider 20% for missing and Damage Slabs						37.80		
							37.80	665.68	25162.70
5	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTD S.R 2016-17)								
	Road Portion	Cum							
	1st Cross		1	70.00	5.00	0.50	175.00		
	Bad reaches		4	1.80	1.50	0.25	2.70		
			3	2.00	1.00	0.25	1.50		
			4	1.80	2.00	0.25	3.60		
			2	4.00	4.50	0.25	9.00		
			10	0.50	5.00	0.25	6.25		
							198.05	148.76	29461.92
6	KSRRB M400-6.2: Construction of granular sub-base by providing Close graded material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with mortar grader on prepared surface and compacting with vibratory roller to achieve the desired density, complete as per specifications. A Plant Mix methad For Grading II Material (P.No.155, I.No.20.4.2 of PW,P&IWTD SR 2016-17)								
	Road Portion	Cum							
	1st Cross		1	70.00	5.00	0.20	70.00		
							70.00	1665.26	116568.20
7	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanial mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWTD SR 2016-17)								
	Road Portion	Cum							
	1st Cross		1	70.00	5.00	0.25	87.50		
	Bad reaches		8	1.80	1.50	0.25	5.40		
			7	2.00	1.00	0.25	3.50		
			6	1.80	2.00	0.25	5.40		
			3	4.00	4.50	0.25	13.50		
			15	0.50	5.00	0.25	9.38		
							124.68	1768.08	220435.37
	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWTD SR 2016-17)								
	Road Portion	Sqm							
	1st Cross		1	70.00	5.00	--	350.00		
	Bad reaches		8	1.80	1.50	--	21.60		
			6	2.00	1.00	--	12.00		
			4	1.80	2.00	--	14.40		
			3	4.00	4.50	--	54.00		
			15	0.50	5.00	--	37.50		
							489.50	29.68	14528.36

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
8	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWTD SR 2016-17)								
	Road Portion	Sqm							
	1st Cross		1	70.00	5.00	--	350.00		
	2nd Cross		1	130.00	5.00	--	650.00		
			1	70.00	5.00	--	350.00		
	3rd Cross		1	120.00	4.20	--	504.00		
	4th Cross		1	110.00	5.80	--	638.00		
	5th Cross		1	30.00	5.80	--	174.00		
	6th Cross		1	55.00	4.20	--	231.00		
	7th Cross		1	55.00	5.50	--	302.50		
	8th Cross		1	80.00	5.00	--	400.00		
							3599.50		
	Deduct prime coat						-489.50		
							3110.00	3.18	9889.80
9	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTD SR of 2016-17)								
	For Laying BC	Sqm							
	1st Cross		1	70.00	5.00	--	350.00		
	2nd Cross		1	130.00	5.00	--	650.00		
			1	70.00	5.00	--	350.00		
	3rd Cross		1	120.00	4.00	--	480.00		
	4th Cross		1	110.00	5.60	--	616.00		
	5th Cross		1	30.00	5.60	--	168.00		
	6th Cross		1	55.00	4.00	--	220.00		
	7th Cross		1	55.00	5.50	--	302.50		
	8th Cross		1	80.00	5.00	--	400.00		
							3536.50	12.72	44984.28
10	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)								
	For Laying BC	Cum							
	1st Cross		1	70.00	5.00	0.04	14.00		
	2nd Cross		1	130.00	5.00	0.04	26.00		
			1	70.00	5.00	0.04	14.00		
	3rd Cross		1	120.00	4.00	0.04	19.20		
	4th Cross		1	110.00	5.60	0.04	24.64		
	5th Cross		1	30.00	5.60	0.04	6.72		
	6th Cross		1	55.00	4.00	0.04	8.80		
	7th Cross		1	55.00	5.50	0.04	12.10		
	8th Cross		1	80.00	5.00	0.04	16.00		
							141.46	8013.60	1133603.86

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
11	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-17)								
	Edge line	Sqm	2	720.00	0.10	--	144.00		
	Centre line		0.5	720.00	0.10	--	36.00		
							180.00	542.72	97689.60
							Total Construction Cost		1917682.412
12	Add cost of Waste Plastic @ 8% of Bitumen weight								
	Bitumen = 141 kg/cum		--	--	--	--	1595.67	27.00	43083.00
	Waste = 141.46 X 141 X 8 / 100 = 1595.67								
13									
14									
									Cost towards Preparation of DPR LS
									19177.00
									Cost towards PMC / Third Party inspection LS
									19177.00
									Sub Total
15									1999119.41
									Miscellaneous and rounding off
									880.59
									Total
									2000000.00

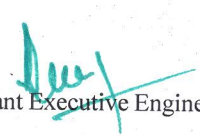
Certificate.

- 1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
- 2 The provisions made in the estimate are necessary and essential.
- 3 The workspot was inspected and work is found to be necessary.
- 4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.



For Tejus Consultants

Assistant Engineer



Assistant Executive Engineer



Executive Engineer

Tejus Consultants

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